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**PATENT** 

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):

Rainer Pommersheim

Examiner:

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September 19, 2006

CONTROLLABLE OR DELAYED RELEASE FOR THE

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Christian P. Bodner

## INFORMATION DISCLOSURE STATEMENT

Sir:

In order to fulfill the requirements of candor and good faith set forth in 37 C.F.R. §1.56, Applicant submits herewith the following Information Disclosure Statement in accordance with the provisions of 37 C.F.R. §1.97 and §1.98.

#### UNITED STATES PATENTS

**PATENTEE** 

PATENT NO.

**ISSUE DATE** 

Franklin Lim, et al.

4,389,419

June 21, 1983

### **FOREIGN PATENT APPLICATIONS**

<b>COUNTRY</b>	APPLICATION NO.	PUBLICATION DATE
Germany	DE19644343A1	April 30, 1998
Germany	DE19918267A1	October 26, 2000
EPO	EP0782853B1	July 9, 1997
Germany	DE2215441	October 12, 1972
Great Britain	GB1471406	April 27, 1977
Germany	DE4312970A1	October 27, 1994

#### **NON-PATENT PUBLICATIONS**

Pommersheim, Die Verkapselung, Mehrschichtige Polelektrokomplex-Mikrokapselsysteme Zur Immobilisierung Von Enzymen Und Lebenden Zellen, 1994, pages 1-32, XP002968623.

Pommersheim, *Physikalische Eigenschaften der Kapsel*, Mehrschichtige Polelektrokomplex-Mikrokapselsysteme Zur Immobilisierung Von Enzymen Und Lebenden Zellen, 1994, pages 88-98, XP002968624.

Pommersheim, Verkapselung von lebenden Zellen, Mehrschichtige Polelektrokomplex-Mikrokapselsysteme Zur Immobilisierung Von Enzymen Und Lebenden Zellen, 1994, pages 1-24, XP002968625.

Riling, et al., Encapsulation of cytochrome C by multilayer microcapsules. A model for improved enzyme immobilization, Journal of Membrane Science, Elsevier Scientific Publication Company. Amsterdam, NL, vol. 129, no. 2, 9 July 1997 (1997-07-09), pages 283-287, XP004084481

Gaumann, et al., Effect of media composition on long-term in vitro stability of barium alginate and polyacrylic acid multilayer microcapsules, Biomaterials, Elsevier Science Publishers BV., Barking, GB, vol. 21, no. 18, September 2000 (2000-09), pages 1911-1917, XP004207026

Pommersheim, et al., *Immobilization of enzymes by multilayer microcapsules*, Macro Chem Phsyics, vol 195, 1994, pages 1557-1567, XP000892044

Schneider, et al., Multilayer capsules: a promising microencapsulation system for transplantation of pancreatic islets, Biomaterials, Elsevier Science Publishers BV., Barking, GB, vol. 22, no. 14, 2001, pages 1961-1970, XP004245913

F. Lim, et al., *Microencapsulated Islets as Bioartificial Endocrine Pancreas*, Science Magazine, vol. 210, 1980, pages 908-910

Receipt date: 09/21/2006 10587494 - GAU: 1796

The above-referenced documents are listed on PTO Form 1449. We have enclosed the cited documents to facilitate reference to them. In conformance with the waiver of the copy requirement in 37 C.F.R. §1.98 for cited U.S. patents issued on August 5, 2003, no copy of the foregoing U.S. patent is enclosed.

A copy of the English version of the International Search Report for the corresponding PCT application serial no. PCT/EP2005/000927 is also submitted herewith.

English abstracts of the European and German patent documents are provided herewith. Full English translations are not readily available. All of the listed publications are in English, except for the first three Pommersheim articles listed on PTO Form 1449 for which English translations are not readily available (the sixth listed Pommersheim article is in English).

Applicant is not aware of any other references to be identified at this time. If the Examiner has any questions or comments relating to the present application, he or she is respectfully invited to contact Applicant's attorney at the telephone number set forth below. If any additional fees are due, please charge our Deposit Account No. 502335. A duplicate copy of this document is enclosed for that purpose.

Respectfully submitted,

Gerald T. Bodner Registration No. 30,449

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(Use several sheets if necessary)

ATTY. DOCKET NO. 1374-3 PCT/US	10587494 - GAU: 1796 SERIAL NO. 10/587,494
APPLICANT Rainer Pommersheim	CONFIRMATION NO. Unassigned

**GROUP** 

Unassigned

SEP 2 1 2006

U.S. PATENT DOCUMENTS

FILING DATE July 26, 2006

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
//SCP//	4,389,419	6/21/1983	Franklin Lim, et al.	426	72	November 10, 1980

**U.S. PATENT DOCUMENTS** 

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
//SCP//						

U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
//SCP//							

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT	DATE	DATE COUNTRY CLASS	CLASS	SUB CLASS	TRANSLATION	
	NUMBER	5/112		02.55		YES	NO
//SCP//	DE19644343A1	4/30/1998	Germany	B01	J13/02	Partial	
//SCP//	DE19918267A1	10/26/2000	Germany	C11	D10/00	Partial	
//SCP//	EP0782853B1	7/9/1997	Europe	A61	K9/52	Partial	
//SCP//	DE2215441	10/12/1972	Germany	C11D	17/00	Partial	
//SCP//	GB1471406	4/27/1977	Great Britain	C11D	10/02	x	
//SCP//	DE4312970A1	10/27/1994	Germany	B01	J13/02	Partial	

**EXAMINER** /S. Camilla Pourbohloul/ **DATE CONSIDERED** 01/27/2010

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication with applicant.

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Receipt date: 1489/25/26000 MENT OF COMMERCE (Rev. 2-32) PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 1374-3 PCT/US	10587494 - GAU: 1796 SERIAL NO. 10/587,494
INFORMATION DISCLOSURE STATEMENT BY APPLICANT	APPLICANT Rainer Pommersheim	CONFIRMATION NO. Unassigned
(Use several sheets if necessary)		
	FILING DATE July 26, 2006	GROUP Unassigned

O	THER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)
//SCP//	Pommersheim, Die Verkapselung, Mehrschichtige Polelektrokomplex- Mikrokapselsysteme Zur Immobilisierung Von Enzymen Und Lebenden Zellen, 1994, pages 1-32, XP002968623.
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//SCP//	Pommersheim, Verkapselung von lebenden Zellen, Mehrschichtige Polelektrokomplex-Mikrokapselsysteme Zur Immobilisierung Von Enzymen Und Lebenden Zellen, 1994, pages 1-24, XP002968625.
//SCP//	Riling, et al., Encapsulation of cytochrome C by multilayer microcapsules.  A model for improved enzyme immobilization, Journal of Membrane Science, Elsevier Scientific Publication Company. Amsterdam, NL, vol. 129, no. 2, 9 July 1997 (1997-07-09), pages 283-287, XP004084481
//SCP//	Gaumann, et al., Effect of media composition on long-term in vitro stability of barium alginate and polyacrylic acid multilayer microcapsules, Biomaterials, Elsevier Science Publishers BV., Barking, GB, vol. 21, no. 18, September 2000 (2000-09), pages 1911-1917, XP004207026
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//SCP//	Schneider, et al., Multilayer capsules: a promising microencapsulation system for transplantation of pancreatic islets, Biomaterials, Elsevier Science Publishers BV., Barking, GB, vol. 22, no. 14, 2001, pages 1961-1970, XP004245913
//SCP//	F. Lim, et al., Microencapsulated Islets as Bioartificial Endocrine Pancreas, Science Magazine, vol. 210, 1980, pages 908-910

EXAMINER/S. Camilla Pourbohloul/

**DATE CONSIDERED** 

01/27/2010

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